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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,224	11/01/2001	Shunpei Yamazaki	07977/288001/US5290/5981	2987
26171	7590	02/25/2005	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			TANG, SON M	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,224

Applicant(s)

YAMAZAKI, SHUNPEI

Examiner

Son M Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bauer et al. [US 6,642,840; Bauer].

Regarding to claims 1-4: Bauer discloses a vehicle comprising:

- a exterior side mirror [330] and interior back mirror [333];
- a camera [26];
- a display device [32] mounted in the side mirror 330 and back mirror 333, wherein the display device displays information read from the camera [shown in Fig. 1-2, 4 col. 10, lines 45-52].

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6, 19-20, 22-23, 25-26, 29-30, 33-34 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. [US 6,642,840; Bauer].

Regarding to claims 5-6: Bauer discloses a vehicle comprising:

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- a exterior side mirror [330] and/or interior back mirror [333];
- a camera [26];
- a display device [32] mounted in the side mirror 330 and back mirror 333;
- a central processing unit [30];
- a video signal processing section [74, 76];
- a control circuit [76, 80] [as shown in Fig. 1-2, 4 and col. 10, lines 45-52, and col. 9, lines 38-55], Bauer does not specifically disclosing that the control circuit provides video signal and timing signal to the display device, since control circuit [76,80] performs the display pixel luminance mapping control, which compress image data of camera system output to a comfortable image on the display [as cited in col. 9, lines 43-50], the compress image signal requires timing function. Therefore, it would have been obvious of one having ordinary skill in the art to recognize that, the control circuit function to provide video signal and timing signal.

Regarding to claims 19-20, 22-23, 25-26, 29-30, 33-34, 37-38:

Bauer further discloses that display device can be a liquid crystal device or number other technologies can be implement into the system [see col. 10, lines 1-5], but lacks of specific that display device is an electroluminescent display device. Examiner takes official notice that it is well known in electrical art that electroluminescent display is one of other type of display, therefore it would have been obvious of one having ordinary skill in the art at the time the invention was made, to have the electroluminescent display device due to the factors such as current cost, user preference, application environment and/or availability of parts at the time of implementation.

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4. Claims 7-10, 18, 21, 24, 28, 32, 36, 39, 42, 45, 48, 63, 66, 40-41, 43-44 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. in view of Gauthier et al. [US 5,303,205; Gauthier].

Regarding to claims 7-10: Bauer discloses a vehicle comprising:

- a exterior side mirror [330] and/or interior back mirror [333];

- a camera [26];

- a display device [32] mounted in the side mirror 330 and back mirror 333;

- a central processing unit [30];

- a video signal processing section [74, 76];

- a control circuit [76, 80] [as shown in Fig. 1-2, 4 and col. 10, lines 45-52, and col. 9, lines 38-55], Bauer does not specifically disclosing that the control circuit provides video signal and timing signal to the display device, since control circuit [76,80] performs the display pixel luminance mapping control, which compress image data of camera system output to a comfortable image on the display [as cited in col. 9, lines 43-50], the compress image signal requires timing function. Therefore, it would have been obvious of one having ordinary skill in the art to recognize that, the control circuit function to provide video signal and timing signal.

Bauer lacks in specifically disclosing a distance sensor to another vehicle, Gauthier teaches a vehicle distance measuring system comprises a distance sensor 60 [Fig. 1-3, col. 6, lines 56-66]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to have a distance sensor as taught by Gauthier into the system of Bauer, for the benefit of safety.

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Regarding to claims 18, 21, 24, 28, 32, 36, 39, 42, 45, 48, 63 and 66: Bauer discloses all the limitation as described above, but lacks in specifically disclosing that wherein a half mirror is provide in the side mirror/back mirror. Gauthier further teaches a half mirror display (interior/exterior mirror) [as cited in col. 10, lines 30-33 and col. 7, lines 13-15]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to have half mirror display as taught by Gauthier into the system of Bauer for the benefit of safety, where full coverage mirror image may blind other conventional zone image.

Regarding to claims 40-41, 43-44, 46-47: Bauer further discloses that display device can be a liquid crystal device or number other technologies can be implement into the system [see col. 10, lines 1-5], but lacks of specific that display device is an electroluminescent display device. It is known in electrical art that electroluminescent display is one of other type of display, therefore it would have been obvious of one having ordinary skill in the art at the time the invention was made, to have the electroluminescent display device due to the factors such as current cost, user preference, application environment and/or availability of parts at the time of implementation.

5. Claims 11-14, 52-53, 55-56, 58-59, 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. in view of Lee [US 5,680,123].

Regarding to claims 11-14: Bauer discloses a vehicle comprising:

- a exterior side mirror [330] and/or interior back mirror [333];
- a camera [26];
- a display device [32] mounted in the side mirror 330 and back mirror 333;

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- a central processing unit [30];
- a video signal processing section [74, 76];
- a control circuit [76, 80] [as shown in Fig. 1-2, 4 and col. 10, lines 45-52, and col. 9, lines 38-55], Bauer does not specifically disclosing that the control circuit provides video signal and timing signal to the display device, since control circuit [76,80] performs the display pixel luminance mapping control, which compress image data of camera system output to a comfortable image on the display [as cited in col. 9, lines 43-50], the compress image signal requires timing function. Therefore, it would have been obvious of one having ordinary skill in the art to recognize that, the control circuit function to provide video signal and timing signal.

Bauer does not specifically disclosing an impact sensor. In an analogous invention to Lee whose teaches a vehicle monitoring system comprises an impact sensor 53 in combination with cameras [as cited in Fig. 5, col. 4, lines 27-35], since impact sensor is an additional sensor in the monitoring system for enhancing safety and accurate. Therefore, one having ordinary skill in the art at the time the invention was made would be motivated to combine, the impact sensor suggested by Lee into the system of Bauer in order to provide more warning information.

Regarding to claims 52-53, 55-56, 58-59, 61-62: Bauer further discloses that display device can be a liquid crystal device or number other technologies can be implement into the system [see col. 10, lines 1-5], but lacks of specific that display device is an electroluminescent display device. It is known in electrical art that electroluminescent display is one of other type of display, therefore it would have been obvious of one having ordinary skill in the art at the time the invention was made, to have the electroluminescent display device due to the factors such as

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current cost, user preference, application environment and/or availability of parts at the time of implementation.

6. Claims 51, 54, 57 and 60 rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. and Lee as applied to claims 10-14 above, and further in view of Gauthier.

Regarding to claims 51, 54, 57, 60: Bauer discloses all the limitation as described above, but lacks in specifically disclosing that wherein a half mirror is provide in the side mirror/back mirror. Gauthier further teaches a half mirror display (interior/exterior mirror) [as cited in col. 10, lines 30-33 and col. 7, lines 13-15]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to have half mirror display as taught by Gauthier into the system of Bauer for the benefit of safety, where full coverage mirror image may blind other conventional zone image.

7. Claims 15-16, 64-65 and 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable Bauer et al. in view of Lee [US 5,680,123] and further in view of Reid [US 5,027,104].

Regarding to claims 15-16: Bauer discloses a vehicle comprising:

- a exterior side mirror [330] and/or interior back mirror [333];
- a camera [26];
- a display device [32] mounted in the side mirror 330 and back mirror 333;
- a central processing unit [30];
- a video signal processing section [74, 76];

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-a control circuit [76, 80] [as shown in Fig. 1-2, 4 and col. 10, lines 45-52, and col. 9, lines 38-55], Bauer does not specifically disclosing an impact sensor. In an analogous invention to Lee whose teaches a vehicle monitoring system comprises an impact sensor 53 in combination with cameras [as cited in Fig. 5, col. 4, lines 27-35], since impact sensor is an additional sensor in monitoring system for enhancing safety and accurate. Therefore, one having ordinary skill in the art at the time the invention was made would be motivated to combine the impact sensor suggested by Lee into the system of Bauer in order to provide more warning information.

Bauer does not specifically disclosing that an audio device having a speaker and microphone. It is clear that, most video camera equipped with an audio microphone for receiving audio signal, Reid teaches a vehicle security system that comprises camera that equipped with microphones so that audio signals can be received and processed [col. 2, lines 8-10]. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made, to combine the equipped microphone camera system of Reid with Bauer system, in order to provide warning image along with actual sound, so operator have a better sense of a situation. And since they both information signal which can be processed in the same manner in the central process unit.

Regarding to claims 64-65 and 67-68: Bauer further discloses that display device can be a liquid crystal device or number other technologies can be implement into the system [see col. 10, lines 1-5], but lacks of specific that display device is an electroluminescent display device. It is known in electrical art that electroluminescent display is one of other type of display, therefore it would have been obvious of one having ordinary skill in the art at the time the invention was made, to have the electroluminescent display device due to the factors such as

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current cost, user preference, application environment and/or availability of parts at the time of implementation.

8. Claims 63 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. and Lee as applied to claims 10-14 above, in view of Reid and further in view of Gauthier.

Regarding to claims 63 and 66: Bauer discloses all the limitation as described above, but lacks in specifically disclosing that wherein a half mirror is provide in the side mirror/back mirror. Gauthier further teaches a half mirror display (interior/exterior mirror) [as cited in col. 10, lines 30-33 and col. 7, lines 13-15]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to have half mirror display as taught by Gauthier into the system of Bauer for the benefit of safety, where full coverage mirror image may blind other conventional zone image.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Secor [US 5,289,321], Petrossian et al. [US 4,910,591], Hsieh [US 5,574,443], Lang et al. [US 2002/0014975] and Schofield et al. [US 6,498,620].

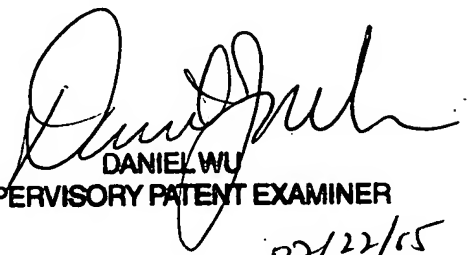
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang


DANIEL WU
SUPERVISORY PATENT EXAMINER
02/22/05